CLAIMS

1.- (currently amended) Operating method for a convertible aircraft (1), equipped with a fuselage (2), standard fixed wings (3) with ailerons, a tail unit (4) with rudders (20), propulsion engines (5), a rotor (6) with blades (7, 8) located on the fuselage, a transmission between the engines and the rotor equipped with a brake and a clutch, and a landing gear (9), the method comprises ~~a~~ direct and reverse transitions from a helicopter mode to an autogyro mode and ~~a direct and reverse transition~~ from an autogyro-helicopter mode to an aeroplane mode, the direct transition from the helicopter mode to the autogyro mode ~~consisting of~~ comprising the following step:

declutching the rotor from the ~~rotor's~~ propulsion ~~engines,~~ engines;

~~and~~ the direct transition from the autogyro-helicopter mode to the aeroplane mode comprising the following ~~stages~~ steps:

adjusting the collective and cyclic pitches of the blades (7, 8) of the rotor (6) to essentially zero degrees, in such a way that they cease to lift and control the aircraft (1) and the latter is lifted by the standard fixed wings and controlled by the ailerons and the rudders (20);

quickly reducing the rotational velocity of the rotor (6) using a brake (24) thereof;

characterized in that the method also comprises

stopping the rotor in a transverse position of at least two of its blades (7, 8) in a position essentially transverse to the direction of flight;

retracting the rotor blades towards ~~the~~ a stem of the aircraft, ~~independently from one another~~ until their longitudinal axis are ~~aligned with the same direction as that of the aircraft's movement~~ parallel to the fuselage (2) of the aircraft;

rotating the blade which had a reverse air flow when the blades were stopped transversely to the direction of the flight to approximately 180° on its pitch axis;

deploying the rotating blades, independently from one another, to an azimuthal position determined by a pre-determined range of angles; ~~and~~

adjusting the angle of attack of the deployed blades until the blades are deployed in a position parallel to the fixed ~~wings,~~ wings; and

the reverse of each of these transitions ~~from comprising the steps above executed~~ accomplished by executing each of the above steps in reverse sequence. ~~and with the opposite actions~~.

2 - 5 (cancelled)

6 – (currently amended) Method, according to claim 1, characterised in that said step of adjusting the angle of attack of the deployed rotating blades (7, 8)~~, in~~ such ~~a way~~ that ~~they are placed on the aircraft's standard fixed wings (3), comprises~~ ~~arranging the blades in~~ each blade is parallel to one of the fixed wings thus transitioning into ~~the form of the side view of~~ a biplane.

7.- (currently amended) Convertible aircraft (1), of the type that comprises a fuselage (2), fixed wings (3) with ailerons, a tail unit (4) with rudders (20), propulsion engines (5), a rotor (6) with blades (7, 8) located on the fuselage, landing gear comprising: ~~and transition~~

a means to transition from helicopter mode to autogyro mode; ~~and vice versa, characterised in that the rotor is equipped with driving~~

a means for the direct ~~and reverse~~ transition ~~(17, 18)~~ from autogyro-helicopter mode to aeroplane mode; ~~, which comprise:~~

a second servo-engine (18) for the regulation of the collective and cyclic pitches of the blades (7, 8) of the rotor (6) to essentially zero degrees, in such a way that they cease to lift and control the aircraft (1) and the latter is lifted and controlled by the ailerons and the rudders (20);

a means to stop the rotors (24) ~~in a transverse position of the blades (7, 8) in a position essentially transverse to the direction of flight~~;

a first servo-engine (17) to retract and deploy the rotor blades both towards and away from the stern of the aircraft, ~~which allows to retract the blades, independently from one another, until their longitudinal axis is~~ to position the blades essentially perpendicular to the fixed wings and when needed is parallel to the fixed wings, ~~aligned with the same direction opposite that of the aircraft's movement,~~ and to deploy ~~them~~ the blades to an azimuthal position determined by a pre-determined range of angles; and to rotate at least one of the rotor blades to approximately 180° on its pitch axis.

8 - 14 (cancelled)

15.- (Previously presented) Convertible aircraft (1), according to claim 7, characterised in that the blades (7, 8) of the rotor (6) are designed in such a way that the chord at the root is greater than the chord at the tips.

16 - (Previously presented) Convertible aircraft (1), according to claim 7, characterised in that said propulsion engines (5) are engines with propellers (11).

17.- (currently amended) Convertible aircraft (1), according to claim 7, characterised in that the propellers (11) are placed ~~on the stem with respect to the standard~~ astern of the fixed wings (3).

18.- (Previously presented) Convertible aircraft (1), according to claim 7, characterised in that said propellers (11) have a variable pitch.

19.- (Previously presented) Convertible aircraft (1), according to claim 7, characterised in that said propulsion engines (5) are piston, gas turbine or jet engines.

20.- (new) Convertible aircraft according to Claim 7 further comprising:

a means to transition from autogyro mode to helicopter mode; and

a means to transition from aeroplane mode to autogyro-helicopter mode.